

December 4, 2014

Douglas Frasier
VPDES Permit Writer, Senior II
Certified Nutrient Management Planner
Regional Toxics Management Program Coordinator
Department of Environmental Quality
Northern Regional Office
13901 Crown Court, Woodbridge, VA 22193

Re: Transmittal
VPDES Permit Application Addendum
VPDES Permit No. VA0090093
John Marshall III Site
McLean, Virginia 22102

Dear Mr. Frasier:

Beacon Capital Partners has enclosed completed copies of the following for our Outfall No. 1 associated with the John Marshall III Site in McLean, Virginia:

- VPDES Permit Application Addendum (Enclosure 1)
- Form 1 – USEPA General Information – Consolidated Permits Program (Enclosure 2), and
- Form 2C – USEPA Existing Manufacturing, Commercial, Mining and Silviculture Operations (Enclosure 3).

In addition to the forms, the location map and source groundwater (prior to treatment) laboratory reports are attached (Enclosures 4 and 5).

The application has been provided as we continue to gather data on the groundwater and outfall. Additional data for Form 2C, sections V.A. and V.B. are being developed and will be forwarded as soon as they are received from the laboratory.

As you are aware, the discharge is treated groundwater that originated at an offsite source that was neither owned nor operated by Beacon Capital Partners. Beacon Capital Partners have collected and treated this water for more than seven (7) years with no contribution from the responsible party. Beacon Capital Partners would like to meet with you as soon as the supplemental data are available

to discuss the de minimis nature of the discharge and the process for termination of the treatment and monitoring.

Respectfully submitted,



Tim Incheck

Associate Vice President

Enclosures

Cc: Robin Burke, Beacon Capital Partners
Edward Stuart, VDEQ
Rebecca Johnson, VDEQ
Michael Ellis, TRC
John Black, TRC

Enclosure 1

VPDES Permit Application Addendum

VPDES PERMIT APPLICATION ADDENDUM

1. **Entity to whom the permit is to be issued:** Beacon Capital Partners
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Yes ~~No~~

3. **Please provide the tax map parcel number for the land where the discharge is located:** 0293 15 0002

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 0

5. **What is the design average flow of this facility in million gallons per day (MGD)?** 0.036 (MGD) For industrial facilities, provide the maximum 30-day average production level, include units: 1,080,000 gallons

6. **In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** ~~Yes~~ No
 If yes, please identify the other flow tiers in MGD: _____
Please consider the following as you answer the questions in #5 above for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

7. **Nature of operations generating wastewater:** Treatment system for groundwater entering sumps in below grade parking structure.
0 % of flow from domestic connections/sources
 Number of private residences to be served by the treatment works: 0
100 % of flow from non-domestic connections/sources

8. **Mode of discharge:** _____ Continuous X Intermittent _____ Seasonal
 Describe frequency and duration of intermittent and seasonal discharges: The sump pumps to a surge tank in a maximum 25 GPM flow. Level controls start and shut off transfer pumps from the surge tank to the tray stripper. The flow is therefore a function of the flow from the groundwater collection system.

9. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point(s):**

Stream Characteristic	Outfall Number						
	<u>1</u>						
Permanent stream, never dry							
Intermittent stream, usually flowing, sometimes dry							
Ephemeral stream, wet-weather flow, often dry	X						
Effluent-dependent stream, usually or always dry							
Lake or pond <u>at or below discharge point</u>							
Other:							

10. **Approval date(s), if applicable:**

Have there been changes in your operation or procedures since the above approval dates? Yes No

- 11. Privately Owned Treatment Works:** If this application is for a privately owned treatment works serving, or designed to serve, 50 or more residences, you must include with your application notification from the State Corporation Commission that you are incorporated in the Commonwealth and verification from the SCC that you are in compliance with all regulations and relevant orders of the State Corporation Commission. Incorporated also includes Limited Liability Companies (LLCs), Limited Partnerships (LPs) and certificates of authority.
- 12. Please provide a list of Materials stored at the facility. Please complete the table below or attach another page if more room is necessary.**

Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures

- 13. Please provide the name and email addresses for personnel who will be involved with the reissuance of the VPDES permit:**

Name	Title	E-mail Address
Tim Incheck	Associate Vice President	Tim.Incheck@cassidyurley.com
John Black	Consultant	jpblack@TRCSolutions.com

14. Consent to receive Electronic Mail

The Department of Environmental Quality (DEQ) may deliver permits and certifications (this includes permit issuances, reissuances, modifications, revocation and reissuances, terminations and denials) to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

☒ Applicant or permittee agrees to receive by electronic mail the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.

If yes, provide email: Tim.Incheck@cassidyurley.com

☐ Applicant or permittee declines to receive by electronic mail the permit that may be issued for the proposed pollutant management activity.

Enclosure 2

Form 1 – USEPA General Information – Consolidated Permits Program



Permits Division

Application Form 1 – General Information

Consolidated Permits Program

This form must be completed by all persons applying for a permit under EPA's Consolidated Permits Program. See the general instructions to Form 1 to determine which other application forms you will need.

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS	
I. EPA I.D. NUMBER				If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
III. FACILITY NAME					
V. FACILITY MAILING ADDRESS					
VI. FACILITY LOCATION					
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .					
SPECIFIC QUESTIONS		Mark "X"		SPECIFIC QUESTIONS	
		YES	NO	FORM ATTACHED	
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)					
		16	17	18	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)					
		22	23	24	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)					
		28	29	30	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)					
		34	35	36	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)					
		40	41	42	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)					
		19	20	21	
D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)					
		25	26	27	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)					
		31	32	33	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)					
		37	38	39	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)					
		43	44	45	
III. NAME OF FACILITY					
C. SKIP					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)					
B. PHONE (area code & no.)					
C. 2					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
C. 3					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
B. CITY OR TOWN					
C. STATE					
D. ZIP CODE					
C. 4					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
C. 5					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
B. COUNTY NAME					
C. 6					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					
C. CITY OR TOWN					
D. STATE					
E. ZIP CODE					
F. COUNTY CODE (if known)					
C. 6					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60					

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VII. SIC CODES (4-digit, in order of priority)

A. FIRST															B. SECOND																
C	7	6512	(specify) Operators of a Nonresidential Building												C	7	(specify)														
15	16	-	19													15	16	-	19												
C. THIRD															D. FOURTH																
C	7	(specify)												C	7	(specify)															
15	16	-	19													15	16	-	19												

VIII. OPERATOR INFORMATION

A. NAME															B. Is the name listed in Item VIII-A also the owner?														
C	8	Tim Incheck												<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO															
15	16													55	56														
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)															D. PHONE (area code & no.)														
F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)															(specify) System automated, owner maintains as needed. Sampling conducted by TRC Engineering, laboratory analyses by EMSL														
P															A (703) 902-6666														
56															15 16 - 18 19 - 21 22 - 26														

E. STREET OR P.O. BOX																																			
8251 Greensboro Drive, B100																																			
26															55																				
F. CITY OR TOWN															G. STATE	H. ZIP CODE	IX. INDIAN LAND																		
C	B	McLean												VA	22102	Is the facility located on Indian lands?																			
15	16													40	41	42	47	-	51	52	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO														

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)															D. PSD (Air Emissions from Proposed Sources)																																	
C	T	I													C	T	I																															
9	N														9	P																																
15	16	17	18													30	15	16	17	18													30															
B. UIC (Underground Injection of Fluids)															E. OTHER (specify)																																	
C	T	I													C	T	I	0090093												(specify) Virginia Pollutant Discharge Elimination System																		
9	U														9	V	A																															
15	16	17	18													30	15	16	17	18													30															
C. RCRA (Hazardous Wastes)															E. OTHER (specify)																																	
C	T	I													C	T	I													(specify)																		
9	R														9																																	
15	16	17	18													30	15	16	17	18													30															

XI. MAP


Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Office building with below grade parking. Below grade parking encountered static water table. Groundwater had been impacted by an offsite facility closed under the Virginia Voluntary Remediation Program.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)															B. SIGNATURE															C. DATE SIGNED														
Tim Incheck																														12/4/2014														
Associate Vice President																																												

COMMENTS FOR OFFICIAL USE ONLY

C																													
15	16													55															

Enclosure 3

Form 2C – USEPA Existing Manufacturing, Commercial, Mining and Silviculture Operations

Permits Division



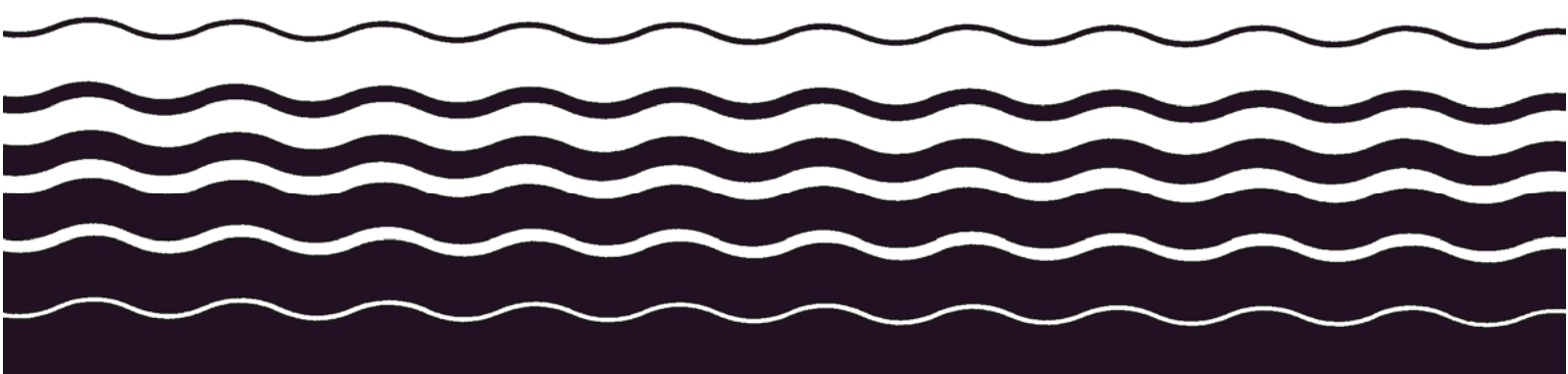
Application Form 2C – Wastewater Discharge Information

Consolidated Permits Program

This form must be completed by all persons applying for an EPA permit to discharge wastewater (*existing manufacturing, commercial, mining, and silvicultural operations*).




Printed on recycled paper



Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

<div>FORM 2C NPDES</div>		<div>U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS Consolidated Permits Program</div>					
I. OUTFALL LOCATION							
For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.							
A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE		D. RECEIVING WATER (name)	
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.		3. SEC.
1	38	55	17	77	14	18	Old Courthouse Spring Branch
II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES							
A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.							
B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.							
1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW			3. TREATMENT			
	a. OPERATION (list)	b. AVERAGE FLOW (include units)		a. DESCRIPTION		b. LIST CODES FROM TABLE 2C-1	
1	Groundwater Treatment System	25 GPM		Surge Tank		1	O
				Tray Air Stripper			
				Discharge		4	A
OFFICIAL USE ONLY (effluent guidelines sub-categories)							

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		C. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
☐ YES (complete Item III-B) ☒ NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
☐ YES (complete Item III-C) ☐ NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
☐ YES (complete the following table) ☒ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.
☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Vinyl Chloride	Groundwater		
trans-1,2,-Dichloroethene	Groundwater		
cis-1,2-Dichloroethene	Groundwater		
Trichloroethylene	Groundwater		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS	
--	--

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below) ☒ NO (go to Item VI-B)

☐ YES (list all such pollutants below)☒ NO (go to Item VI-B)

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VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (identify the test(s) and describe their purposes below)

☒ NO (go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Phase Separation Science, Inc.	6630 baltimore National Pike Baltimore, Maryland 21228	(410) 747-8770	pH Vinyl Chloride trans-1,2-Dichloroethene cis-1,2-Dichloroethene Trichloroethene
EMSL Analytical, Inc.	200 Route 130 North Cinnaminson, NJ 08077	(856) 303-2500	Vinyl Chloride trans-1,2-Dichloroethene cis-1,2-Dichloroethene Trichloroethene

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

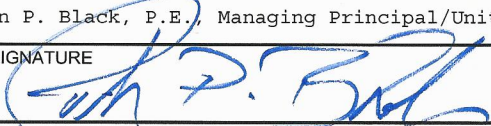
A. NAME & OFFICIAL TITLE (type or print)

John P. Black, P.E., Managing Principal/Unit Leader

B. PHONE NO. (area code & no.)

(703) 251-4845

C. SIGNATURE



D. DATE SIGNED

12/4/2014

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

VAD988200432

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)										OUTFALL NO. 1			
PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.													
1. POLLUTANT	2. EFFLUENT				d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)					
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)			c. LONG TERM AVRG. VALUE (if available)		a. LONG TERM AVERAGE VALUE (1)		b. NO. OF ANALYSES			
a. Biochemical Oxygen Demand (BOD)	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	a. CONCENTRATION	b. MASS	CONCENTRATION		(2) MASS		
b. Chemical Oxygen Demand (COD)													
c. Total Organic Carbon (TOC)													
d. Total Suspended Solids (TSS)													
e. Ammonia (as N)													
f. Flow	VALUE		VALUE		VALUE				VALUE				
g. Temperature (winter)	VALUE		VALUE		VALUE			°C	VALUE				
h. Temperature (summer)	VALUE		VALUE		VALUE			°C	VALUE				
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM			STANDARD UNITS						
PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.													
1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES		
a. Bromide (24959-67-9)		X											
b. Chlorine, Total Residual		X											
c. Color		X											
d. Fecal Coliform		X											
e. Fluoride (16984-48-8)		X											
f. Nitrate-Nitrite (as N)		X											

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION		b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION		c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION		b. NO. OF ANALYSES
			(2) MASS	(2) MASS	(1) CONCENTRATION	(2) MASS					(2) MASS		
g. Nitrogen, Total Organic (as N)		<input checked="" type="checkbox"/>											
h. Oil and Grease		<input checked="" type="checkbox"/>											
i. Phosphorus (as P), Total (7723-14-0)		<input checked="" type="checkbox"/>											
j. Radioactivity													
(1) Alpha, Total		<input checked="" type="checkbox"/>											
(2) Beta, Total		<input checked="" type="checkbox"/>											
(3) Radium, Total		<input checked="" type="checkbox"/>											
(4) Radium 226, Total		<input checked="" type="checkbox"/>											
k. Sulfate (as SO ₄) (14808-79-8)		<input checked="" type="checkbox"/>											
l. Sulfide (as S)		<input checked="" type="checkbox"/>											
m. Sulfite (as SO ₃) (14265-45-3)		<input checked="" type="checkbox"/>											
n. Surfactants		<input checked="" type="checkbox"/>											
o. Aluminum, Total (7429-90-5)		<input checked="" type="checkbox"/>											
p. Barium, Total (7440-39-3)		<input checked="" type="checkbox"/>											
q. Boron, Total (7440-42-8)		<input checked="" type="checkbox"/>											
r. Cobalt, Total (7440-48-4)		<input checked="" type="checkbox"/>											
s. Iron, Total (7439-89-6)		<input checked="" type="checkbox"/>											
t. Magnesium, Total (7439-95-4)		<input checked="" type="checkbox"/>											
u. Molybdenum, Total (7439-98-7)		<input checked="" type="checkbox"/>											
v. Manganese, Total (7439-96-5)		<input checked="" type="checkbox"/>											
w. Tin, Total (7440-31-5)		<input checked="" type="checkbox"/>											
x. Titanium, Total (7440-32-6)		<input checked="" type="checkbox"/>											

CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
VAD988200432	1

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			b. NO. OF ANALYSES
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X												
2M. Arsenic, Total (7440-38-2)			X												
3M. Beryllium, Total (7440-41-7)			X												
4M. Cadmium, Total (7440-43-9)			X												
5M. Chromium, Total (7440-47-3)			X												
6M. Copper, Total (7440-50-8)			X												
7M. Lead, Total (7439-92-1)			X												
8M. Mercury, Total (7439-97-6)			X												
9M. Nickel, Total (7440-02-0)			X												
10M. Selenium, Total (7782-49-2)			X												
11M. Silver, Total (7440-22-4)			X												
12M. Thallium, Total (7440-28-0)			X												
13M. Zinc, Total (7440-66-6)			X												
14M. Cyanide, Total (57-12-5)			X												
15M. Phenols, Total			X												
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X												
DESCRIBE RESULTS															

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS				5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS														
1V. Acrolein (107-02-8)			X											
2V. Acrylonitrile (107-13-1)			X											
3V. Benzene (71-43-2)			X											
4V. Bis (Chloro-methyl) Ether (542-88-1)				DELISTED	02-4-81	ANALYSIS	NOT	REQUIRED	FOR	THIS				
5V. Bromoform (75-25-2)			X											
6V. Carbon Tetrachloride (56-23-5)			X											
7V. Chlorobenzene (108-90-7)			X											
8V. Chlorodi-bromomethane (124-48-1)			X											
9V. Chloroethane (75-00-3)			X											
10V. 2-Chloro-ethylvinyl Ether (110-75-8)			X											
11V. Chloroform (67-66-3)			X											
12V. Dichloro-bromomethane (75-27-4)			X											
13V. Dichloro-difluoromethane (75-71-8)				DELISTED	01-8-81	ANALYSIS	NOT	REQUIRED	FOR	THIS				
14V. 1,1-Dichloro-ethane (75-34-3)			X											
15V. 1,2-Dichloro-ethane (107-06-2)			X											
16V. 1,1-Dichloro-ethylene (75-35-4)		X												
17V. 1,2-Dichloro-propane (78-87-5)			X											
18V. 1,3-Dichloro-propylene (542-75-6)			X											
19V. Ethylbenzene (100-41-4)			X											
20V. Methyl Bromide (74-83-9)														
21V. Methyl Chloride (74-87-3)														

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS			5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)													
22V. Methylene Chloride (75-09-2)			X										
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X										
24V. Tetrachloroethylene (127-18-4)			X										
25V. Toluene (108-88-3)			X										
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X										
27V. 1,1,1-Trichloroethane (71-55-6)			X										
28V. 1,1,2-Trichloroethane (79-00-5)			X										
29V. Trichloroethylene (79-01-6)		X											
30V. Trichlorofluoromethane (75-69-4)				DELISTED	01-8-81	ANALYSIS	NOT	REQUIRED	FOR	THIS			
31V. Vinyl Chloride (75-01-4)	X												
GC/MS FRACTION – ACID COMPOUNDS													
1A. 2-Chlorophenol (95-57-8)			X										
2A. 2,4-Dichlorophenol (120-83-2)			X										
3A. 2,4-Dimethylphenol (105-67-9)			X										
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X										
5A. 2,4-Dinitrophenol (51-28-5)			X										
6A. 2-Nitrophenol (88-75-5)			X										
7A. 4-Nitrophenol (100-02-7)			X										
8A. P-Chloro-M-Cresol (59-50-7)			X										
9A. Pentachlorophenol (87-86-5)			X										
10A. Phenol (108-95-2)			X										
11A. 2,4,6-Trichlorophenol (88-05-2)			X										

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS														
1B. Acenaphthene (83-32-9)			X											
2B. Acenaphthylene (208-96-8)			X											
3B. Anthracene (120-12-7)			X											
4B. Benzidine (92-87-5)			X											
5B. Benzo (a) Anthracene (56-55-3)														
6B. Benzo (a) Pyrene (50-32-8)			X											
7B. 3,4-Benzofluoranthene (205-99-2)			X											
8B. Benzo (ghi) Perylene (191-24-2)			X											
9B. Benzo (k) Fluoranthene (207-08-9)			X											
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X											
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X											
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			X											
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X											
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X											
15B. Butyl Benzyl Phthalate (85-68-7)			X											
16B. 2-Chloronaphthalene (91-58-7)			X											
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X											
18B. Chrysene (218-01-9)			X											
19B. Dibenzo (a,h) Anthracene (53-70-3)			X											
20B. 1,2-Dichlorobenzene (95-50-1)			X											
21B. 1,3-Dichlorobenzene (541-73-1)			X											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)													
22B. 1,4-Dichloro-benzene (106-46-7)			X										
23B. 3,3-Dichloro-benzidine (91-94-1)			X										
24B. Diethyl Phthalate (84-66-2)			X										
25B. Dimethyl Phthalate (131-11-3)			X										
26B. Di-N-Butyl Phthalate (84-74-2)			X										
27B. 2,4-Dinitro-toluene (121-14-2)			X										
28B. 2,6-Dinitro-toluene (606-20-2)			X										
29B. Di-N-Octyl Phthalate (117-84-0)			X										
30B. 1,2-Diphenyl-hydrazine (as Azo-benzene) (122-66-7)			X										
31B. Fluoranthene (206-44-0)			X										
32B. Fluorene (96-73-7)			X										
33B. Hexachloro-benzene (118-74-1)			X										
34B. Hexachloro-butadiene (87-68-3)			X										
35B. Hexachloro-cyclopentadiene (77-47-4)			X										
36B. Hexachloro-ethane (67-72-1)			X										
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X										
38B. Isophorone (78-59-1)			X										
39B. Naphthalene (91-20-3)			X										
40B. Nitrobenzene (98-95-3)			X										
41B. N-Nitro-sodimethylamine (62-75-9)			X										
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X										

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)													
43B. N-Nitro-sodiphenylamine (86-30-6)			X										
44B. Phenanthrene (85-01-8)			X										
45B. Pyrene (129-00-0)			X										
46B. 1,2,4-Tri-chlorobenzene (120-82-1)			X										
GC/MS FRACTION – PESTICIDES													
1P. Aldrin (309-00-2)			X										
2P. α-BHC (319-84-6)			X										
3P. β-BHC (319-85-7)			X										
4P. γ-BHC (68-89-9)			X										
5P. δ-BHC (319-86-8)			X										
6P. Chlordane (57-74-9)			X										
7P. 4,4'-DDT (50-29-3)			X										
8P. 4,4'-DDE (72-55-9)			X										
9P. 4,4'-DDD (72-54-8)			X										
10P. Dieldrin (60-57-1)			X										
11P. α-Endosulfan (115-29-7)			X										
12P. β-Endosulfan (115-29-7)			X										
13P. Endosulfan Sulfate (1031-07-8)			X										
14P. Endrin (72-20-8)			X										
15P. Endrin Aldehyde (7421-93-4)			X										
16P. Heptachlor (76-44-8)			X										

EPA I.D. NUMBER (copy from Item 1 of Form 1)

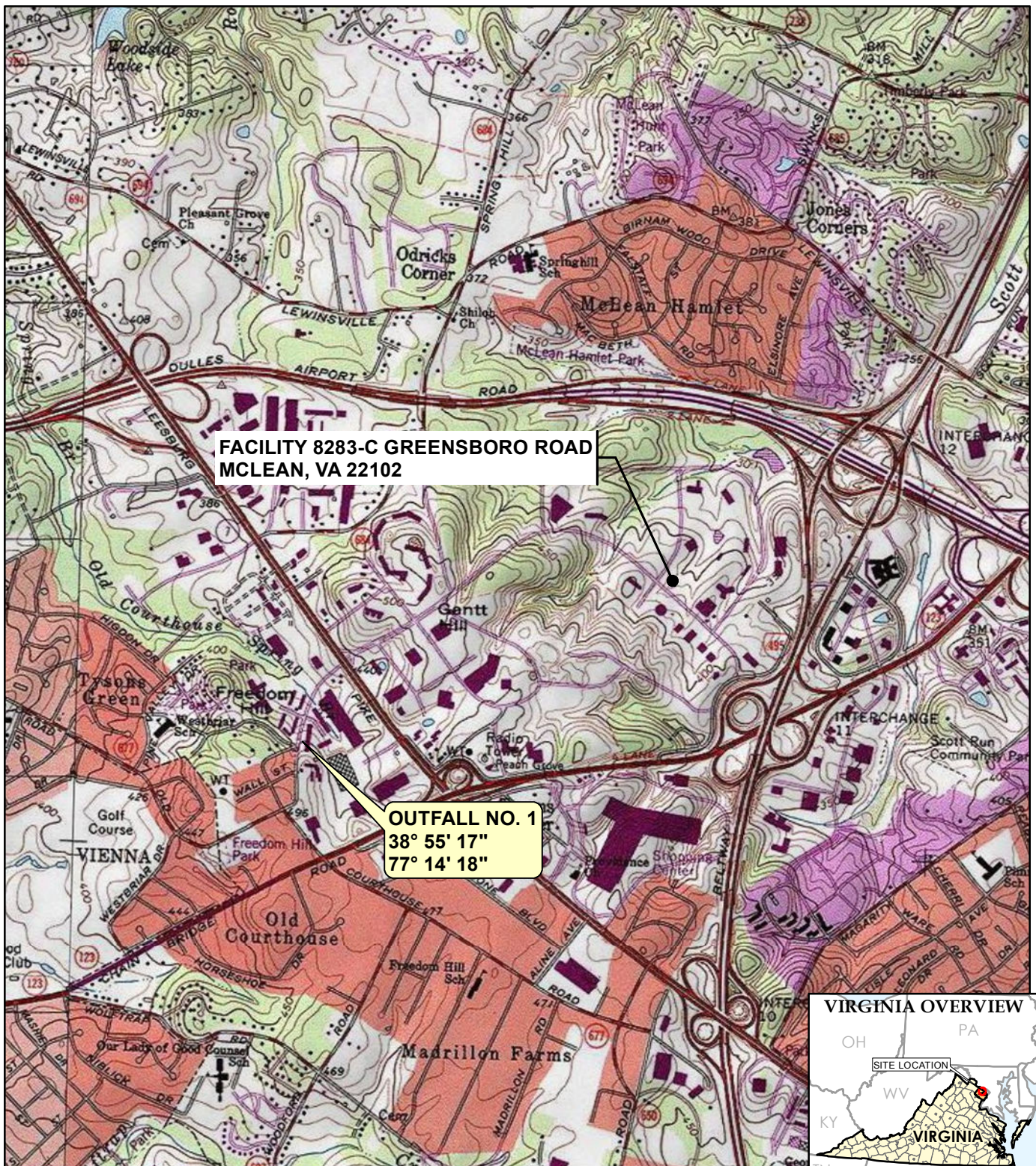
OUTFALL NUMBER

CONTINUED FROM PAGE V-8

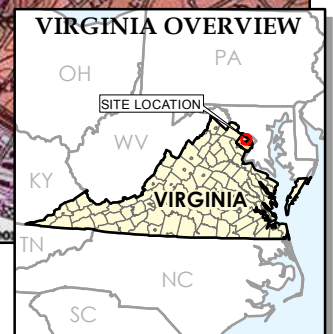
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES (continued)													
17P. Heptachlor Epoxide (1024-57-3)			X										
18P. PCB-1242 (53469-21-9)			X										
19P. PCB-1254 (11097-69-1)			X										
20P. PCB-1221 (11104-28-2)			X										
21P. PCB-1232 (11141-16-5)			X										
22P. PCB-1248 (12672-29-6)			X										
23P. PCB-1260 (11096-82-5)			X										
24P. PCB-1016 (12674-11-2)			X										
25P. Toxaphene (8001-35-2)			X										

Enclosure 4
Location Map

TRC - GIS



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



WORKING COPY



708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

BEACON CAPITAL PARTNERS
MCLEAN, VIRGINIA

FACILITY AND OUTFALL LOCATION
VPDES PERMIT NO. VA 0090093

DRAWN BY:	RHODE B
APPROVED BY:	
PROJECT NO:	225474
FILE NO:	225474-001slm.mxd
DATE:	DECEMBER 2014

FIGURE 1

Enclosure 5
Analytical Data



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn: **Mike Ellis**
TRC Solutions
243 Church Street NW
Vienna, VA 22180

10/21/2014

Phone: (703) 242-6082
Fax:

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 10/17/2014. The results are tabulated on the attached data pages for the following client designated project:

John Marshall

The reference number for these samples is EMSL Order #011405685. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.

NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>EnvChemistry2@emsl.com

EMSL Order: 011405685

CustomerID: TRCV42

CustomerPO: 225855

ProjectID:

Attn: **Mike Ellis**
TRC Solutions
243 Church Street NW
Vienna, VA 22180

Phone: (703) 242-6082

Fax:

Received: 10/17/14 9:20 AM

Project: John Marshall

Analytical Results**Client Sample Description** JM-01**Collected:** 10/16/2014 **Lab ID:** 0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
624-Volatiles	See Attached		N/A		10/20/2014	WF	10/20/2014	WF

Definitions:

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: EMSL ANALYTICAL		Customer Sample#: JM-01
EMSL Sample ID: 011405685-0001	Project:	
Lab File ID: T6293.D	Sample Matrix:	Waste Water
Instrument ID: VOA MSD-T	Sampling Date:	10/16/2014
Analyst: WRF	Analysis Date:	10/20/2014 2:13:00 PM
GC Column: RTX-VMS (0.25 mm)	Level (low/med):	LOW
Sample wt/vol: 5 ML	Nominal Amount:	5 ML
Dilution Factor: 1	Method:	EPA 624
Heated Purge (Y/N): N		

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-01-4	Vinyl chloride	5.0		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0	40	
79-01-6	Trichloroethene	5.0	340	D1

Qualifier Definitions
 U = Undetected
 B = Compound detected in method blank
 E = Estimated value
 J = Estimated concentration.
 D = Dilution
 D1 = T6301.D (Analysis Time: 10/20/14 18:46:00 , Dil. Factor= 5.0)



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn:

Mike Ellis
TRC Solutions
243 Church Street NW
Vienna, VA 22180

11/21/2014

Phone: (703) 242-6082

Fax:

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/20/2014. The results are tabulated on the attached data pages for the following client designated project:

JM III

The reference number for these samples is EMSL Order #011406420. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.

NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>EnvChemistry2@emsl.com

EMSL Order: 011406420

CustomerID: TRCV42

CustomerPO: 225855

ProjectID:

Attn: **Mike Ellis**
TRC Solutions
243 Church Street NW
Vienna, VA 22180

Phone: (703) 242-6082
Fax:
Received: 11/20/14 9:30 AM

Project: JM III

Analytical Results**Client Sample Description** (2) JMIII-01

Collected: 11/19/2014
3:00:00 PM
Lab ID: 0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
624-Volatiles	See Attached		N/A		11/20/2014	WF	11/20/2014	WF

Definitions:

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

Customer Sample#:		(2) JMIII-01		
Lab Name:		Project:		
EMSL Sample ID:	011406420-0001	Sample Matrix:	Waste Water	
Lab File ID:	T6550.D	Sampling Date:	11/19/2014	
Instrument ID:	VOA MSD-T	Analysis Date:	11/20/2014 6:59:00 PM	
Analyst:	WRF	Level (low/med):	LOW	
GC Column:	RTX-VMS X 60m (0.25 mm)	Nominal Amount:	5 ML	
Sample wt/vol:	5 ML	Method:	EPA 624	
Dilution Factor:	1			
Heated Purge (Y/N):	N			

CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-01-4	Vinyl chloride	5.0		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0	38	
79-01-6	Trichloroethene	5.0	320	D1

Qualifier Definitions
 U = Undetected
 B = Compound detected in method blank
 E = Estimated value
 J = Estimated concentration.
 D = Dilution
 D1 = T6554.D (Analysis Time: 11/21/14 08:28:00 , Dil. Factor= 5.0)



EMSL ANALYTICAL, INC.
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EMSL Order Number (Lab Use Only):

011406420

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Page 1 of 1 pages

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

V. INTAKE AND EFFLUENT CHARACTERISTICS (<i>continued from page 3 of Form 2-C</i>)		OUTFALL NO.
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (<i>specify if blank</i>)		4. INTAKE (<i>optional</i>)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (<i>if available</i>)		c. LONG TERM AVRG. VALUE (<i>if available</i>)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (<i>BOD</i>)												
b. Chemical Oxygen Demand (<i>COD</i>)												
c. Total Organic Carbon (<i>TOC</i>)												
d. Total Suspended Solids (<i>TSS</i>)												
e. Ammonia (<i>as N</i>)												
f. Flow	VALUE		VALUE		VALUE					VALUE		
g. Temperature (<i>winter</i>)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (<i>summer</i>)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (<i>if available</i>)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (<i>optional</i>)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (<i>if available</i>)		c. LONG TERM AVRG. VALUE (<i>if available</i>)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual														
c. Color														
d. Fecal Coliform														
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (<i>as N</i>)														

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease														
i. Phosphorus (as P), Total (7723-14-0)														
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO ₄) (14808-79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO ₃) (14265-45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)														
p. Barium, Total (7440-39-3)														
q. Boron, Total (7440-42-8)														
r. Cobalt, Total (7440-48-4)														
s. Iron, Total (7439-89-6)														
t. Magnesium, Total (7439-95-4)														
u. Molybdenum, Total (7439-98-7)														
v. Manganese, Total (7439-96-5)														
w. Tin, Total (7440-31-5)														
x. Titanium, Total (7440-32-6)														

EPA I.D. NUMBER <i>(copy from Item 1 of Form 1)</i>	OUTFALL NUMBER
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CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE <i>(optional)</i>		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
METALS, CYANIDE, AND TOTAL PHENOLS																
1M. Antimony, Total (7440-36-0)																
2M. Arsenic, Total (7440-38-2)																
3M. Beryllium, Total (7440-41-7)																
4M. Cadmium, Total (7440-43-9)																
5M. Chromium, Total (7440-47-3)																
6M. Copper, Total (7440-50-8)																
7M. Lead, Total (7439-92-1)																
8M. Mercury, Total (7439-97-6)																
9M. Nickel, Total (7440-02-0)																
10M. Selenium, Total (7782-49-2)																
11M. Silver, Total (7440-22-4)																
12M. Thallium, Total (7440-28-0)																
13M. Zinc, Total (7440-66-6)																
14M. Cyanide, Total (57-12-5)																
15M. Phenols, Total																
DIOXIN																
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)				DESCRIBE RESULTS												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)						
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – VOLATILE COMPOUNDS																			
1V. Accrolein (107-02-8)																			
2V. Acrylonitrile (107-13-1)																			
3V. Benzene (71-43-2)																			
4V. Bis (Chloro- methyl) Ether (542-88-1)																			
5V. Bromoform (75-25-2)																			
6V. Carbon Tetrachloride (56-23-5)																			
7V. Chlorobenzene (108-90-7)																			
8V. Chlorodi- bromomethane (124-48-1)																			
9V. Chloroethane (75-00-3)																			
10V. 2-Chloro- ethylvinyl Ether (110-75-8)																			
11V. Chloroform (67-66-3)																			
12V. Dichloro- bromomethane (75-27-4)																			
13V. Dichloro- difluoromethane (75-71-8)																			
14V. 1,1-Dichloro- ethane (75-34-3)																			
15V. 1,2-Dichloro- ethane (107-06-2)																			
16V. 1,1-Dichloro- ethylene (75-35-4)																			
17V. 1,2-Dichloro- propane (78-87-5)																			
18V. 1,3-Dichloro- propylene (542-75-6)																			
19V. Ethylbenzene (100-41-4)																			
20V. Methyl Bromide (74-83-9)																			
21V. Methyl Chloride (74-87-3)																			

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE <i>(optional)</i>						
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – VOLATILE COMPOUNDS <i>(continued)</i>																			
22V. Methylene Chloride (75-09-2)																			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)																			
24V. Tetrachloroethylene (127-18-4)																			
25V. Toluene (108-88-3)																			
26V. 1,2-Trans-Dichloroethylene (156-60-5)																			
27V. 1,1,1-Trichloroethane (71-55-6)																			
28V. 1,1,2-Trichloroethane (79-00-5)																			
29V Trichloroethylene (79-01-6)																			
30V. Trichlorofluoromethane (75-69-4)																			
31V. Vinyl Chloride (75-01-4)																			
GC/MS FRACTION – ACID COMPOUNDS																			
1A. 2-Chlorophenol (95-57-8)																			
2A. 2,4-Dichlorophenol (120-83-2)																			
3A. 2,4-Dimethylphenol (105-67-9)																			
4A. 4,6-Dinitro-O-Cresol (534-52-1)																			
5A. 2,4-Dinitrophenol (51-28-5)																			
6A. 2-Nitrophenol (88-75-5)																			
7A. 4-Nitrophenol (100-02-7)																			
8A. P-Chloro-M-Cresol (59-50-7)																			
9A. Pentachlorophenol (87-86-5)																			
10A. Phenol (108-95-2)																			
11A. 2,4,6-Trichlorophenol (88-05-2)																			

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE <i>(optional)</i>		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)															
2B. Acenaphthylene (208-96-8)															
3B. Anthracene (120-12-7)															
4B. Benzidine (92-87-5)															
5B. Benzo (a) Anthracene (56-55-3)															
6B. Benzo (a) Pyrene (50-32-8)															
7B. 3,4-Benzo-fluoranthene (205-99-2)															
8B. Benzo (ghi) Perylene (191-24-2)															
9B. Benzo (k) Fluoranthene (207-08-9)															
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)															
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)															
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)															
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)															
14B. 4-Bromophenyl Phenyl Ether (101-55-3)															
15B. Butyl Benzyl Phthalate (85-68-7)															
16B. 2-Chloro-naphthalene (91-58-7)															
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)															
18B. Chrysene (218-01-9)															
19B. Dibenzo (a,h) Anthracene (53-70-3)															
20B. 1,2-Dichloro-benzene (95-50-1)															
21B. 1,3-Di-chloro-benzene (541-73-1)															

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE <i>(optional)</i>					
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS <i>(continued)</i>																			
22B. 1,4-Dichloro- benzene (106-46-7)																			
23B. 3,3-Dichloro- benzidine (91-94-1)																			
24B. Diethyl Phthalate (84-66-2)																			
25B. Dimethyl Phthalate (131 -11-3)																			
26B. Di-N-Butyl Phthalate (84-74-2)																			
27B. 2,4-Dinitro- toluene (121-14-2)																			
28B. 2,6-Dinitro- toluene (606-20-2)																			
29B. Di-N-Octyl Phthalate (117-84-0)																			
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)																			
31B. Fluoranthene (206-44-0)																			
32B. Fluorene (86-73-7)																			
33B. Hexachloro- benzene (118-74-1)																			
34B. Hexachloro- butadiene (87-68-3)																			
35B. Hexachloro- cyclopentadiene (77-47-4)																			
36B Hexachloro- ethane (67-72-1)																			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)																			
38B. Isophorone (78-59-1)																			
39B. Naphthalene (91-20-3)																			
40B. Nitrobenzene (98-95-3)																			
41B. N-Nitro- sodimethylamine (62-75-9)																			
42B. N-Nitrosodi- N-Propylamine (621-64-7)																			

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE <i>(optional)</i>						
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS <i>(continued)</i>																			
43B. N-Nitro-sodiphenylamine (86-30-6)																			
44B. Phenanthrene (85-01-8)																			
45B. Pyrene (129-00-0)																			
46B. 1,2,4-Tri-chlorobenzene (120-82-1)																			
GC/MS FRACTION – PESTICIDES																			
1P. Aldrin (309-00-2)																			
2P. α-BHC (319-84-6)																			
3P. β-BHC (319-85-7)																			
4P. γ-BHC (58-89-9)																			
5P. δ-BHC (319-86-8)																			
6P. Chlordane (57-74-9)																			
7P. 4,4'-DDT (50-29-3)																			
8P. 4,4'-DDE (72-55-9)																			
9P. 4,4'-DDD (72-54-8)																			
10P. Dieldrin (60-57-1)																			
11P. α-Endosulfan (115-29-7)																			
12P. β-Endosulfan (115-29-7)																			
13P. Endosulfan Sulfate (1031-07-8)																			
14P. Endrin (72-20-8)																			
15P. Endrin Aldehyde (7421-93-4)																			
16P. Heptachlor (76-44-8)																			

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)															
18P. PCB-1242 (53469-21-9)															
19P. PCB-1254 (11097-69-1)															
20P. PCB-1221 (11104-28-2)															
21P. PCB-1232 (11141-16-5)															
22P. PCB-1248 (12672-29-6)															
23P. PCB-1260 (11096-82-5)															
24P. PCB-1016 (12674-11-2)															
25P. Toxaphene (8001-35-2)															